AMENDMENTS TO THE CLAIMS

1. (Original) A contact combustion –type gas sensor consisting of a gas detecting element that is housed in a case, said gas detecting element comprising an induction portion made of an oxidation catalyst powder and a insulating powder fixed to a heater that generates Joule heat, wherein said induction portion contains not less than 30 percent by weight of said oxidation catalyst.

2. (Original) The contact combustion-type gas sensor according to claim 1, wherein said induction portion is formed by mixing said oxidation catalyst powder and said insulating powder with a solution and fixing the mixture onto the heater.

3. (Original) The contact combustion-type gas sensor according to claim 1, wherein said induction portion is formed by fixing a slurry of said insulating powder to make a solidified body and then fixing a slurry of said oxidation catalyst powder to the solidified body of said insulating powder.

4. (Original) The contact combustion-type gas sensor according to claim 1, wherein the outer surface of said induction portion is formed to have a high concentration of said oxidation catalyst.

5. (Currently Amended) The contact combustion-type gas sensor according to claim 1 ~~or claim 2~~, wherein said oxidation catalyst comprises one type or a plurality of types chosen from platinum (Pt), palladium (Pd) , platinum oxide (PtO) and palladium oxide (PdO).

6. (Currently Amended) The contact combustion-type gas sensor according to claim 1 ~~any one of claims 1 through 5~~, wherein an aging process is performed to converge the sensitivity loss due to silicon vapor.

7. (Original) The contact combustion-type gas sensor according to claim 6, wherein said aging process is performed by energizing the heater in the gas detecting element to make it generate heat.

8. (Original) The contact combustion-type gas sensor according to claim 6, wherein the concentration of said silicon vapor is set higher than the concentration of silicon in the environment used for measurement.

9. (Currently Amended) The contact combustion-type gas sensor according to claim 6 ~~or claim 7~~, wherein said aging process is set to a temperature higher than the operating temperature of said gas detecting element.

10. (Original) The contact combustion-type gas sensor according to claim 1, wherein the contact combustion-type gas sensor is disposed in the gas outlet path on the cathode side of the polymer-type fuel cell to detect hydrogen in an environment that contains silicon vapor and hydrogen.

11. (Original) A method of manufacturing a contact combustion-type gas sensor that carries a catalyst on a metal oxide sintered body carrier fixed to a resistance thermometer bulb, characterized by the steps of

heating the contact combustion-type gas sensor to 130°C to 500°C and poisoning until fluctuations over time in the catalytic proficiency of said catalyst in an atmosphere that includes silicon compounds stabilizes to a prescribed value.

12. (Original) the manufacturing method of a contact combustion-type gas sensor according to claim 11, wherein said atmosphere includes between 10 ppm and 30,000 ppm of at least one of hexamethyldisiloxane, hexamethyldisilazane, and hexamethyldisilane.

13. (Original) The manufacturing method for a contact combustion-type gas sensor according to claim 11, wherein said atmosphere includes between 100ppm and 20,000 ppm of at least one of hexamethyldisiloxane, hexamethyldisilazane, and hexamethyldisilane.

14. (Original) The manufacturing method for a contact combustion-type gas sensor according to claim 11, wherein said atmosphere includes between 10 ppm and 30,000 ppm of at least one of hexamethyldisiloxane, hexamethyldisilazane, and hexamethyldisilane, and between 100 ppm and 40,000 ppm of hydrogen.

15. (Original) The manufacturing method for a contact combustion-type gas sensor according to claim 14, wherein the hydrogen concentration in said atmosphere is between 1,000 ppm and 20,000 ppm.

16. (Original) A contact combustion-type gas sensor that carries a catalyst on a metal oxide sintered body carrier fixed to a resistance thermometer bulb, wherein said metal oxide is at least one type chosen from alumina, silica, or zeolite, and poisoning is performed in advance until fluctuations over time in the catalyst proficiency of said catalyst in an atmopshere that includes silicon compounds stabilizes to a prescribed value.

17. (Original) The contact combustion-type gas sensor according to claim 16, wherein the temperature for said poisoning is 130°C to 500°C.

18. (Original) The contact combustion-type gas sensor according to claim 16, wherein said oxidation catalyst is at least one type chosen from platinum, ruthenium, palladium, and rhodium.

19. (Original) The contact combustion-type gas sensor according to claim 16, wherein said atmosphere that includes silicon compounds includes between 10 ppm and 30,000 ppm of at least one of hexamethyldisiloxane, hexamethyldisilazane, and hexamethyldisilane.

20. (Original) The contact combustion-type gas sensor according to claim 16, wherein tsaid atmosphere includes between 10 ppm and 20,000 ppm of at least one of hexamethyldisiloxane, hexamethyldisilazane, and hexamethyldisilane.

21. (Original) The contact combustion-type gas sensor according to claim 16, wherein said atmosphere includes between 10 ppm and 30,000 ppm of at least one of hexamethyldisiloxane, hexamethyldisilazane, and hexamethyldisilane, and between 100 ppm and 40,000 ppm of hydrogen.

22. (Original) The contact combustion-type gas sensor according to claim 21, wherein the hydrogen concentration in said atmosphere is between 1,000 ppm and 20,000 ppm.

23. (Original) The contact combustion-type gas sensor according to claim 16, wherein the contact combustion-type gas sensor is disposed in the gas outlet path on the cathode side of the polymer-type fuel cell to detect hydrogen.